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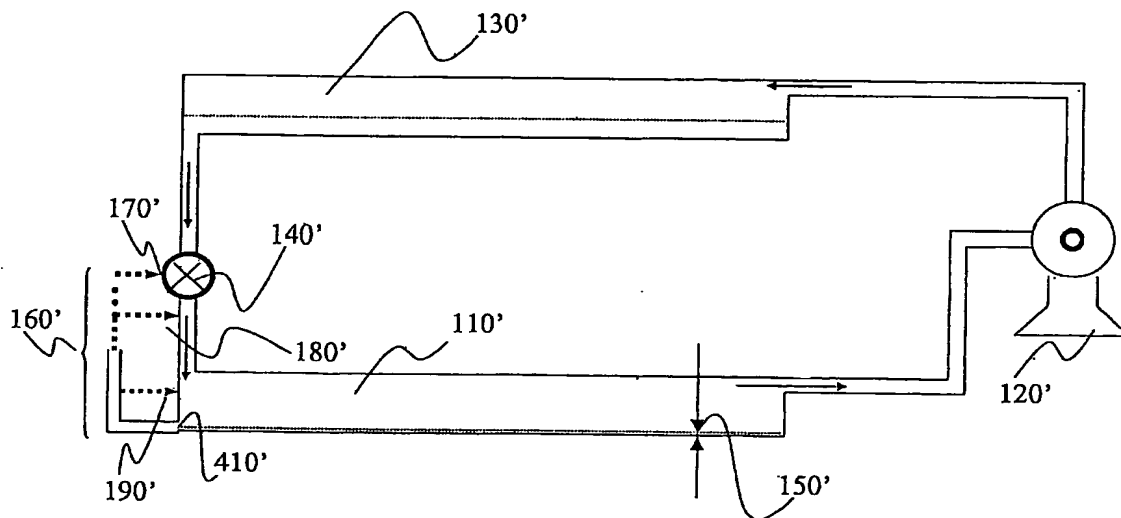
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(54) Title: EVAPORATOR AND HEAT EXCHANGER WITH EXTERNAL LOOP, AS WELL AS HEAT PUMP SYSTEM AND AIR CONDITIONING SYSTEM COMPRISING SAID EVAPORATOR OR HEAT EXCHANGER



(57) Abstract: The present invention relates generally to an evaporator and more specifically to an evaporator having an evaporating chamber (110') equipped with drainage means (160'). The drainage means (160') drain accumulated liquid from the evaporator's lower parts and include an external expansion driven injector and/or an external pump. The evaporator according to the invention can be used e.g. in a heat exchanger, e.g. in a heat pump system or air condition system, and said vacuum driven injector can be integrated with an expansion means (140') of the heat exchanger. The invention also relates to a condenser to be used together with said evaporator in a heat exchanger of the plate type realising an integrated superheater/superc cooler. This is accomplished by the definition and use of delimited interacting zones through which the cooling medium circulates under heat exchange with itself.